



# How does my garden grow... if there are metals in the soil ?

Eating fruits and vegetables provides important vitamins in your diet and helps protect you from disease. Home gardening is fun and a good way to get healthy food.

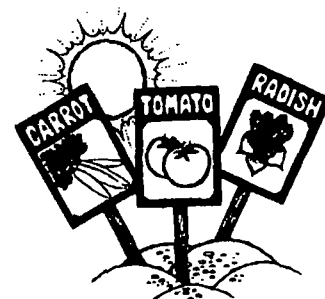
But what about metals in garden soil, such as lead, arsenic, cadmium?



Environmental scientists are studying soil samples in the Globeville and Vasquez Blvd/I-70 area to evaluate health risks from metals. Here is some information about metals and gardens, and some ways you can reduce levels of metals which may be in the soil. With common gardening practices, you can enjoy the food grown in your garden.

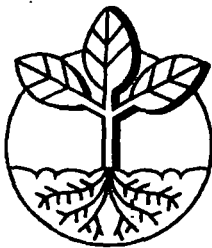
## Some facts about metals and gardens:

- Most gardening practices, such as adding compost and topsoil, reduce the amount of metals which may be found in the soil.
- Produce from the garden usually has less metal than the soil it's grown in. This is because not all the metal is absorbed by the plant.
- Plants vary in how much of each metal they take up and store from the soil. For example, arsenic is not taken up easily by most garden plants.
- Fruit trees generally do not store high levels of metals in the fruit.



## How do the metals get from the soil into the garden plants that I eat?

The main way plants take in metals is from the roots, along with the things plants need for growth.



A smaller amount of metals may get into the plant in small particles the plant "breathes" in through leaf openings.

Metals may also be in the dust or soil that collects on the plant.

### What can I do to help protect my health?

Keep eating a healthy diet with plenty of fruits and vegetables. You can mix the source of your produce, eating some produce grown in your garden, and some from the store.

If your garden soil has been replaced as part of a cleanup, do not worry about metals in the soil. The new soil is safe for growing fruits and vegetables.

Add things to your garden soil like compost and topsoil, lime and phosphate (available at your local garden store). This will lower the amount of metal taken up by plants.

Avoid using sewage sludge as a soil enricher because sewage sludge may also have a high metal content.

Wash and peel fruits and vegetables. This will lower any dust and metals on the outside of the produce.



**You can call the following people at the Colorado Department of Public Health and Environment for more information:**

For information on metals in your garden soil for the  
Globeville and Vasquez Blvd/I-70 area:

Barbara O'Grady  
303-692-3395 or 888-569-1831  
[barbara.ograd@state.co.us](mailto:barbara.ograd@state.co.us)

Marion Galant  
303-692-3304 or 888-569-1831  
[marion.galant@state.co.us](mailto:marion.galant@state.co.us)

For information on garden soil studies and health  
effects:

Jane Mitchell  
303-692-2644 or 1-800-886-7689  
[jane.mitchell@state.co.us](mailto:jane.mitchell@state.co.us)

[State Seal]  
April 1999

Prepared by: Colorado Department of Public Health & Environment, 4300 Cherry Creek Drive South, Denver, CO 80246-1530. (303-692-2785). This fact sheet was supported in whole by funds from the Comprehensive Environmental Response, Compensation, and Liability Act trust fund through a cooperative agreement with the Agency for Toxic Substances and Disease Registry, Public Health Service, US Dept. of Health & Human Services.